State of North Carolina
Department of Environment and Natural Resources
Division of Water Quality

Animal Waste Management Systems
Request for Certificate of Coverage
Facility Currently Covered by an Expiring NPDES General Permit

On July 1, 2012, the North Carolina NPDES General Permits for Animal Waste Management Systems will expire. Facilities that have been issued Certificates of Coverage to operate under these NPDES General Permits must apply for renewal within 30 days of receipt of this application.

Please do not leave any question unanswered. Please make any necessary corrections to the data below.

1. Facility Number: 19-43 and Certificate of Coverage Number: NCA219043
2. Facility Name: Thurman Jessup Farm
3. Landowner's name (same as on the Waste Management Plan): Thurman Jessup
4. Landowner's mailing address: 6633 Brush Creek Rd.
   City/State: Bennett, NC Zip: 27208
   Telephone Number (include area code): 336-879-5623 **E-mail:**
5. **Facility's physical address:** 1710 Glover Church Rd.
   City/State: Bennett, NC **Zip:** 27208
6. County where facility is located: Chatham
7. Farm Manager's name (If different than the Landowner): Norris Randall Jessup
8. Farm Manager's telephone number (include area code):
9. Integrator's name (if there is not an integrator write "None"):
10. Lessee's name (if there is not a lessee write "None"):
11. Indicate animal operation type and number:

Swine		**Cattle**		**Dry Poultry**	
Wean to Finish		Dairy Calf		Non Laying Chickens	
Wean to Feeder		Dairy Heifer		Laying Chickens	
Farrow to Finish	✓	Milk Cow		Turkeys	
Feeder to Finish	2900	Dry Cow		Other	
Farrow to Wean		Beef Stocker Calf		Pullets	
Farrow to Feeder		Beef Feeder		Turkey Poults	
Boar/Stud		Beef Brood Cow			
Gilts		Other			
Other				**Wet Poultry**	
Horses - Horses		Sheep - Sheep		Non Laying Pullets	
Horses - Other		Sheep - Other		Layers	

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Aquifer Protection Section

Submit two (2) copies of the most recent Certified Animal Waste Management Plan (CAWMP). The CAWMP must include the following components. Some of these components may not have been required at the time the facility was certified but should be added to the CAWMP for permitting purposes:

- The Waste Utilization Plan (WUP) must include the amount of Plant Available Nitrogen (PAN) produced and utilized by the facility
- The method by which waste is applied to the disposal fields (e.g. irrigation, injection, etc.)
- A map of every field used for land application
- The soil series present on every land application field
- The crops grown on every land application field
- The Realistic Yield Expectation (RYE) for every crop shown in the WUP
- The PAN to be applied to every land application field
- Phosphorous to be applied on every land application field with a "HIGH" PLAT rating.
- The waste application windows for every crop utilized in the WUP
- The required NRCS Standard specifications
- A site schematic
- Emergency Action Plan
- Insect Control Checklist with chosen best management practices noted
- Odor Control Checklist with chosen best management practices noted
- Mortality Control Checklist with the selected method noted. A mass mortality plan must also be included.
- Site-Specific Conservation Practices necessary to prevent runoff of pollutants to waters of the State.
- PLAT results including datasheets for each field.
- Lagoon/storage pond capacity documentation (design, calculations, etc.); please be sure to include any site evaluations, wetland determinations, or hazard classifications that may be applicable to your facility
- Operation and Maintenance Plan

I attest that this application has been reviewed by me and is accurate and complete to the best of my knowledge. I understand that, if all required parts of this application are not completed and that if all required supporting information and attachments are not included, this application package will be returned to me as incomplete. **Note:** In accordance with NC General Statutes 143-215.6A and 143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application may be subject to civil penalties up to $25,000 per violation. (18 U.S.C. Section 1001 provides a punishment by a fine of not more than $10,000 or imprisonment of not more than 5 years, or both for a similar offense.)

Printed Name of Signing Official (Landowner, or if multiple Landowners all landowners should sign. If Landowner is a corporation, signature should be by a principal executive officer of the corporation):

Name: Thurman Jessup Title: OWNER

Signature: Thurman Jessup Date: 3-8-2012

Name: Norris Randall Jessup Title: MANAGER

Signature: Norris R Jessup Date: 3-9-2012

THE COMPLETED APPLICATION SHOULD BE SENT TO THE FOLLOWING ADDRESS:

NCDENR – DWQ Animal Feeding Operations Unit
1636 Mail Service Center
Raleigh, North Carolina 27699-1636
Telephone Number: (919) 807-6300
Fax Number: (919) 807-6354

RECEIVED/DENR/DWQ
MAR 16 2012
Aquifer Protection Section

Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Coleen H. Sullins, Director
Division of Water Quality

August 1, 2007

Thurman C Jessup
Thurman Jessup Farm
6633 Brush Creek Farm Rd
Bennett, NC 27208

Subject: Certificate of Coverage No. NCA219043
Thurman Jessup Farm
Animal Waste Management System
Chatham County

Dear Thurman C Jessup:

In accordance with your application received on January 10, 2007, we are hereby forwarding to you this Certificate of Coverage (COC) issued to Thurman C Jessup, authorizing the operation of the subject animal waste management system in accordance with NPDES General Permit NCA200000.

This approval shall consist of the operation of this system including, but not limited to, the management and land application of animal waste as specified in the facility's Certified Animal Waste Management Plan (CAWMP) for the Thurman Jessup Farm, located in Chatham County, with an animal capacity of no greater than the following swine annual averages:

Wean to Finish: **0**	Feeder to Finish: **2900**	Boar/Stud: **0**
Wean to Feeder: **0**	Farrow to Wean: **0**	Gilts: **0**
Farrow to Finish: **0**	Farrow to Feeder: **0**	

If this is a Farrow to Wean or Farrow to Feeder operation, there may also be one boar for each 15 sows. Where boars are unneccessary, they may be replaced by an equivalent number of sows. Any of the sows may be replaced by gilts at a rate of 4 gilts for every 3 sows

The COC shall be effective from the date of issuance until June 30, 2012 and replaces the NPDES COC issued to this facility with an expiration date of July 1, 2007. Pursuant to this COC, you are authorized and required to operate the system in conformity with the conditions and limitations as specified in the General Permit, the facility's CAWMP, and this COC. An adequate system for collecting and maintaining the required monitoring data and operational information must be established for this facility. Any increase in waste production greater than the certified design capacity or increase in number of animals authorized by this COC (as provided above) will require a modification to the CAWMP and this COC and must be completed prior to actual increase in either wastewater flow or number of animals.

Please carefully read this COC and the enclosed General Permit. This General Permit contains many new requirements than the previous NPDES General Permit. Enclosed for your convenience is a package containing the new and revised forms used for record keeping and reporting. Please pay careful attention to the record keeping and monitoring conditions in this permit. The Animal Facility Annual Certification Form must be completed and returned to the Division of Water Quality by no later than March 1st of each year.

If your Waste Utilization Plan has been developed based on site-specific information, careful evaluation of future samples is necessary. Should your records show that the current Waste Utilization Plan is inaccurate you will need to have a new Waste Utilization Plan developed.

Aquifer Protection Section
Internet: www.ncwaterquality.org
1636 Mail Service Center
Location: 2728 Capital Boulevard
Raleigh, NC 27699-1636
Raleigh, NC 27604
Telephone: (919) 733-3221
Fax 1: (919) 715-0588
Fax 2: (919) 715-6048
Customer Service: (877) 623-6748

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The issuance of this COC does not excuse the Permittee from the obligation to comply with all applicable laws, rules, standards, and ordinances (local, state, and federal), nor does issuance of a COC to operate under this permit convey any property rights in either real or personal property.

Upon abandonment or depopulation for a period of four years or more, the Permittee must submit documentation to the Division demonstrating that all current NRCS standards are met prior to restocking of the facility.

Per 15A NCAC 02T .0111(c), a compliance boundary is provided for the facility and no new water supply wells shall be constructed within the compliance boundary. Per NRCS standards a 100-foot separation shall be maintained between water supply wells and any lagoon or any wetted area of a spray field.

Per 15A NCAC 02T .1306, any containment basin, such as a lagoon or waste storage structure, shall continue to be subject to the conditions and requirements of the facility's permit until closed to NRCS standards and the permit is rescinded by the Division.

Please be advised that any violation of the terms and conditions specified in this COC, the General Permit or the CAWMP may result in the revocation of this COC, or penalties in accordance with NCGS 143-215.6A through 143-215.6C, the Clean Water Act and 40 CFR 122.41 including civil penalties, criminal penalties, and injunctive relief.

If you wish to continue the activity permitted under the General Permit after the expiration date of the General Permit, an application for renewal must be filed at least 180 days prior to expiration.

This COC is not automatically transferable. A name/ownership change application must be submitted to the Division prior to a name change or change in ownership.

If any parts, requirements, or limitations contained in this COC are unacceptable, you have the right to apply for an individual NPDES Permit by contacting the staff member listed below for information on this process. Unless such a request is made within 30 days, this COC shall be final and binding.

This facility is located in a county covered by our Raleigh Regional Office. The Regional Office Aquifer Protection Staff may be reached at (919) 791-4200. If you need additional information concerning this COC or the General Permit, please contact the Animal Feeding Operations Unit staff at (919) 733-3221.

Sincerely,

for Coleen H. Sullins, Director

Enclosures (General Permit NCA200000, Record Keeping and Reporting Package)

cc: (Certificate of Coverage only for all cc's)
Chatham County Health Department
Chatham County Soil and Water Conservation District
Raleigh Regional Office, Aquifer Protection Section
AFO Unit Central Files
Permit File NCA219043

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP) – North Carolina

Certification Sheet

Animal Feeding Operation (AFO) Name:	**Thurman Jessup Swine Farm**
Owner(s):	**Thurman Jessup**
Address:	**6933 Brush Creek Farm Bennett, NC 27208**
Farm/Tract Numbers	**142,166,168,5949,59490,5981,9420**
County(ies)	**Chatham**

OVERALL COMPREHENSIVE NUTRIENT MANAGEMENT PLAN APPROVAL

Certified Conservation Planner (CCP): As a CCP in North Carolina, I have reviewed your conservation plan prepared for the farms/tracts listed above, and determined that it meets the technical requirements for a USDA Comprehensive Nutrient Management Plan (CNMP). This Plan includes planned (or existing) practices for the following CNMP components: (1) Manure and Wastewater Handling and Storage, (2) Land Treatment, (3) Land Application of Manure or Organic Products, and (4) information on recommended Record Keeping. This CNMP may also include components that address Feed Management and Other Utilization Options. This CNMP contains all land units specific to this AFO that you own, operate, or have decision-making authority and on which manure or organic by-products will be generated, handled, stored, or applied.

Signature: Carl Henry Outz Jr.	Date: 5/9/12
Name (printed): **Carl Henry Outz Jr**	
Title: **Certified Conservation Planner**	Agency/Org.: **Chatham SWCD**

DESIGN OF CNMP COMPONENTS/PRACTICES

CNMP Manure and Wastewater Storage and Handling: All practices needed for the handling and storage of manure and wastewater either exist or have been designed according to NRCS standards.

Signature: Carl Henry Outz Jr.	Date: 5/9/12
Name (printed): **Carl Henry Outz Jr**	
Title: **Certified Conservation Planner**	Agency/Org: **Chatham SWCD**

Land Treatment: All practices needed to maintain soil erosion to a sustainable level (on fields planned for manure application) either exist or have been designed according to NRCS standards.

Signature: Carl Henry Outz Jr.	Date: 5/9/12
Name (printed): **Carl Henry Outz Jr**	
Title: **Certified Conservation Planner**	Agency/Org: **Chatham SWCD**

CNMP Land Application: The nutrient management/waste utilization plan has been developed according to NRCS standards 590, 633, and other applicable standards.

Signature: Carl Henry Outz Jr	Date: 5/9/12
Name (printed): **Carl Henry Outz Jr**	
Title: **Certified Conservation Planner**	Agency/Org: **Chatham SWCD**

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP) – North Carolina

Additional Information for Producers

WHAT IS A USDA COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP)?

Your CNMP is a USDA Conservation Plan that addresses the natural resource concerns associated with the management of manure and wastewater from livestock operation. Your CNMP addresses:

Manure and Wastewater Storage and Handling	Your CNMP ensures your operation has adequate collection, storage, and/or treatment of manure and organic by-products that allow land application of wastes in an environmentally sound manner. Manure handling and animal mortality disposal practices that are designed as part of your CNMP will meet applicable NRCS standards.
Land Application of Manure and Wastewater	Your CNMP includes a Nutrient Management/Waste Utilization Plan for all fields where manure or organic by-products are applied to ensure that nitrogen, phosphorus, and other potential pollutants do not cause a water quality problem. Your Nutrient Management Plan meets NRCS's standards 590 and 633 in the Field Office Technical Guide.
Land Treatment for Application Areas	Your CNMP includes erosion control practices on all land where manure or organic by-products are applied to ensure soil loss is kept to a sustainable level. Example practices include conservation tillage, cover crops, contour farming, diversions or terraces, or similar practices. All erosion control practices designed as part of your CNMP will meet NRCS standards in the Field Office Technical Guide.
Record Keeping	Although operation and maintenance records are your responsibility, your CNMP includes record-keeping recommendations associated with each practice in your CNMP. State laws and regulations identify specific record-keeping requirements for regulated or permitted operations.

Your CNMP may also address:

Feed Management	Feed management activities may be used to reduce the nutrient content of manure, reducing land application requirements. Examples include phase feeding, amino acid supplemented low crude protein diets, or the use of low phytin phosphorus grain and enzymes, such as phytase. You should always consult a professional animal nutritionist before making any changes, as feed management activities are not a viable or acceptable alternative for all operations.
Other Utilization Options	There are a number of alternative technologies to conventional manure management being evaluated in North Carolina and across the Nation as environmentally safe alternatives to land application of manure.

NORTH CAROLINA LAWS AND REGULATIONS

USDA does not have a regulatory role for nutrient management. Although CNMPs are only required by USDA for animal operations participating in the Environmental Quality Incentives Program under the 2002 and 2008 Farm Bills, your CNMP may assist you in meeting federal or state water quality regulations or permit requirements. You should be aware of applicable laws and regulations in North Carolina that regulate the storage, handling, and land application of manure and organic by-products generated on your operation. For additional information on certified Waste Utilization Plans and applicable state laws and regulations, contact the North Carolina Department of Environment and Natural Resources, Division of Water Quality (919) 733-5083 or Division of Soil and Water Conservation (919) 733-2302.

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP) – North Carolina

Checklist

CNMP Developer Initials: _CHO_____

Animal Feeding Operation (AFO) Name:	Thurman Jessup Swine Farm
Owner(s):	Thurman Jessup

The items identified in the Plan column must be included in the Conservation Plan to report a CNMP as written (Practice Code 102). The items in the Design column may be completed during the practice design for the specific CNMP components. Items identified in the Applied column must be completed to report a CNMP as applied (Practice Code 103). Per NRCS policy, CNMP documentation may also include a copy of the Certified Animal Waste Management Plan. Compliance with NC or EPA regulatory permitting or non-discharge certification options may require application of all planned and designed components. Referenced NC NRCS conservation practice standards that comprise the Field Office Technical Guide (FOTG) may be obtained at: *http://www.nrcs.usda.gov/technical/efotg/*

Plan	Design	Applied	Site information	Remarks/Location
☑			Names, phone numbers, and addresses of the AFO owner(s) and operator(s).	
☑			Location of production site: Legal description, driving instructions from nearest post office, and/or the emergency 911 coordinates.	
☑			Conservation plan map, and farmstead sketch showing the general location of barns, pens, storage structures, etc. Clearly identified field identification numbers or codes.	
☑			Soils maps with interpretations appropriate for planned CNMP practices. Available from NRCS field offices or NRCS Web Soil Survey for many areas. *http://websoilsurvey.nrcs.usda.gov/app/*	
	☑		Existing documentation of present facility components that would aid in evaluating existing conditions, capacities, etc. (i.e., as-built plans, year installed, number of animals a component was originally designed for, etc.).	
Plan	**Design**	**Applied**	**Production Information**	
☑			Animal Inventory Sheet: Animal types, phases of production, and length of confinement for each type at this site	
☑			Animal numbers and average weight for each phase of production on this site. Information available from NRCS 633 Waste Utilization Standard.	
☑			Calculated manure and wastewater volumes for this site. Amount of manure and wastewater to be land applied. Information available from NRCS 633 Waste Utilization Standard.	
	☑		Manure storage type, volume, and approximate length of storage.	
Plan	**Design**	**Applied**	**Applicable Permits or Certifications**	
☑			Producer and operators informed of their responsibilities to comply with any applicable Federal, tribal, state, or local permits and/or ordinances, including operator certification, NPDES or other federal/state permits.	

Checklist

CNMP Developer Initials :__ CHO

Plan	Design	Applied	Land Application Site Information	
☑			Nutrient management (590)/waste utilization (633) plan prepared in accordance with applicable FOTG standards, including but not limited to:	
☑			▪ Maps of land application area (field identified consistent with plan map) showing land use and with marked setbacks, buffers, and waterways, and environmentally sensitive areas.	*Note: Shaded items are required for all land owned or controlled by producer*
☑			▪ Third-party applicator/manure hauler agreement with documentation of amount of waste transferred—NRCS 633 EXHIBIT B	IF NECESSARY N/A
☑			▪ Landowner names, addresses, for land application fields not owned by producer.	
☑			▪ Phosphorus Loss Assessment Tool (PLAT) and/or LI risk assessments for potential nitrogen or phosphorus transport from fields. PLAT software available for download at: *http://www.soil.ncsu.edu/nmp/ncnmwg/*	
☑			▪ Crop types, realistic yield targets, and expected nutrient uptake amounts.	
☑			▪ Application equipment descriptions and methods of application.	
☑			▪ Expected application seasons and estimated days of application per season.	
☑			▪ Estimated application amounts per acre (volume in gallons or tons per acre, and pounds of plant available nitrogen, phosphorus as P205, and potassium as K20 per acre).	
☑			▪ Estimate of acres needed to apply manure generated on this site, respecting any guidelines published for nitrogen or phosphorus soil loading limits.	
☑			▪ Lagoon Sludge Application Caution Page (if applicable)	
		☑	▪ Application rates do not exceed limiting nutrient (N or P) specified in plan	
Plan	**Design**	**Applied**	**Land Treatment Site Information**	
☑		☑	Practices exist, or are planned and applied, that achieve sustainable soil loss tolerance (based on soil type) on land application area (i.e., residue management, cropping rotation, diversions).	
☑			RUSLE Worksheet (Current Version). RUSLE 2 software available for download at: *http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm*	
☑			NC-CPA-52 Environmental Assessment. Form and instructions available at *http://www.nc.nrcs.usda.gov/technical/TechRef/CPForms.html*	
✓	☑	☑	Practice designs/specifications for erosion control practices per applicable FOTG standards.	
Plan	**Design**	**Applied**	**Manure & Wastewater Storage and Handling**	
	☑		Practice designs/specifications for manure and wastewater storage, treatment, and handling practices per applicable FOTG standards, including emergency action plans.	
		☑	Practices for proper storage and handling of manure and wastewater are implemented according to design or meet NRCS standards through as-built evaluation	

	☑	☑	Critically eroding areas around manure and wastewater storage structures stabilized to facilitate proper operation and maintenance of the structures.	
Plan	**Design**	**Applied**	**Actual Activity Records**	
☑			Producer informed of record-keeping responsibilities according to 590 and 633 standards, and applicable state regulations on the storage, transport, transfer, testing, and application of manure. Including but not limited to:	
☑			▪ Soil and manure test reports.	
☑		☑	▪ Applied rates, methods of application, and timing (month and year) of nutrients applied (include all sources of nutrients-manure, commercial fertilizers, etc.).	
☑			▪ Current and/or planned crop rotation.	
☐			▪ Weather conditions during nutrient application (optional).	
☑			▪ General soil moisture condition at time of application [i.e., saturated, wet, moist, dry] (optional).	
☐			▪ Actual crop and yield harvest from manure application sites if used in lieu of RYEs.	
☑		☑	▪ Record of internal inspections for manure system components.	
☐		☐	▪ Record of any spill events.	IF NEEDED NA
☑			▪ Changes or modifications to CNMP (may also require changes to applicable Permit)	
Plan	**Design**	**Applied**	**Mortality Disposal**	
☑			Practices planned for morality disposal.	Rendering
	☐		Design specifications and equipment used to implement the disposal plan.	
		☐	Practices designed to properly dispose of operation mortality are implemented according to design	
Plan	**Design**	**Applied**	**Operation and Maintenance**	
	☑		Detailed operation and maintenance procedures for the conservation system, holding facility, etc., contained in the CNMP. This would include procedures such as calibration of land application equipment, storage facility emptying schedule, soil and manure sampling techniques, etc.	
☑			Client has been provided guidance on establishing and maintaining good vegetative cover on areas around constructed agricultural facilities (such as poultry houses). If necessary, client should utilize NC Technical Note for Erosion and Sediment Control Planning at Animal Feeding Operations found in Sec I of the NC NRCS Field Office Technical Guide.	

ACKNOWLEDGEMENT OF THE POTENTIAL IMPACTS ON A SITE FROM APPLYING LAGOON SLUDGE

As part of either a lagoon closure operation or on-going lagoon maintenance, the attached plan has been developed to apply sludge to the following areas:

Tracts & Field Numbers: _**-T-142 Flds 1,2,3,4, T-166 Flds 1,2,3,4,5, T-168 Flds 1,2,4, T-5949 Flds 1,2,3,4,5,6,7,8,9, T-59490 Fld 1,T-5981 Flds 1,2,3, T-9420 Flds 1**_____

While using animal waste as a source of nutrients for crops in lieu of inorganic fertilizers is an ecologically sound practice, producers should be aware that sludge that accumulates in a lagoon may have high concentrations of nutrients and/or heavy metals. Accordingly, the quantity of phosphorus and micronutrients in the material to be applied may exceed the fertility requirements of planned crops.

Metals. High concentrations of metals in the soil can impact crop growth or yields. The application of lagoon sludge has the potential to significantly increase the concentration of metals (particularly copper and zinc) in the soil. NCSU and NCDA&CS recommend that alternative sites for waste application be sought when soil concentrations of zinc (Zn) exceed 142 lbs/ac (Zn-I of 2000) or copper (Cu) exceed 72 lbs/ac (Cu-I of 2000). A Cu-I or Zn-I of 3000 is recognized as a critical toxic level for some crops. For peanuts, alternative sites are recommended when the Zn-I is 300, and a Zn-I of 500 is recognized as a critical toxic level. Producers should be aware of the post-application Cu and Zn concentrations predicted on the sites planned for sludge application. Additionally, soil pH should be maintained at 6.0 or above to minimize risk of toxicity.

Phosphorus. Phosphorus (P) concentration in lagoon sludge may be high. Because P adsorbs onto iron, aluminum, and calcium, the soil can bind and store excess P. When P concentrations reach higher concentrations, there is an increasing potential for P to be transported offsite and become a pollutant of surface waters. This transport may occur through soil erosion, or as a soluble form in surface runoff or leaching. An assessment of the risk for P loss to surface water is required as part of a nutrient management plan for permitted operations or those receiving federal or state cost-share assistance. If the potential for P transport offsite is high, then future application of animal waste may not be allowed in a nutrient management plan. Producers should be aware that applying lagoon sludge may limit the ability to use the site for future animal waste application. Accordingly, applying lagoon sludge to fields that are planned for future waste application as part of a nutrient management plan is not advised.

*I understand that applying macronutrients or micronutrients at rates that significantly exceed the expected crop removal could limit the future use of the field as a waste application site, and in some cases, negatively impact future plant growth. I voluntarily agree to apply sludge to the fields identified above that I own or operate according to the attached nutrient management plan or lagoon closure plan. (*Both landowner and farmer/operator must sign.)*

Sherman Joseph — *Owner** — 5/7/12 — *Date*

Ann R Joseph — *Farmer/Operator** — 5/7/12 — *Date*

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN (CNMP) – North Carolina

Animal Inventory Sheet

Animal Feeding Operation (AFO) Name:	**Thurman Jessup Swine Farm**	Date Prepared:	**5/7/12**
Owner(s):	**Thurman Jessup**	Farm/Tract Numbers:	**T-142,166,168,5949,59490, 5981,9420**
Address:	**6933 Brush Creek Farm Bennett, NC 27208**	County(ies):	**Chatham**

Confinement Site *(e.g. Lagoon 1)*	**Animal Type** *(e.g. Swine)*	**Phase of Production** *(e.g. Feeder to Finish)*	**Length of Confinement** (days) *(e.g. 105 days)*	**Animal Numbers**	**Average Weight** (lbs) *(e.g. 135 lbs)*	**Number of Groups/Flocks** per year *(e.g. 3 groups)*
Lagoon 1	**Swine**	**Feeder to Finish**	**125**	**2900**	**135 lbs**	**2.5**

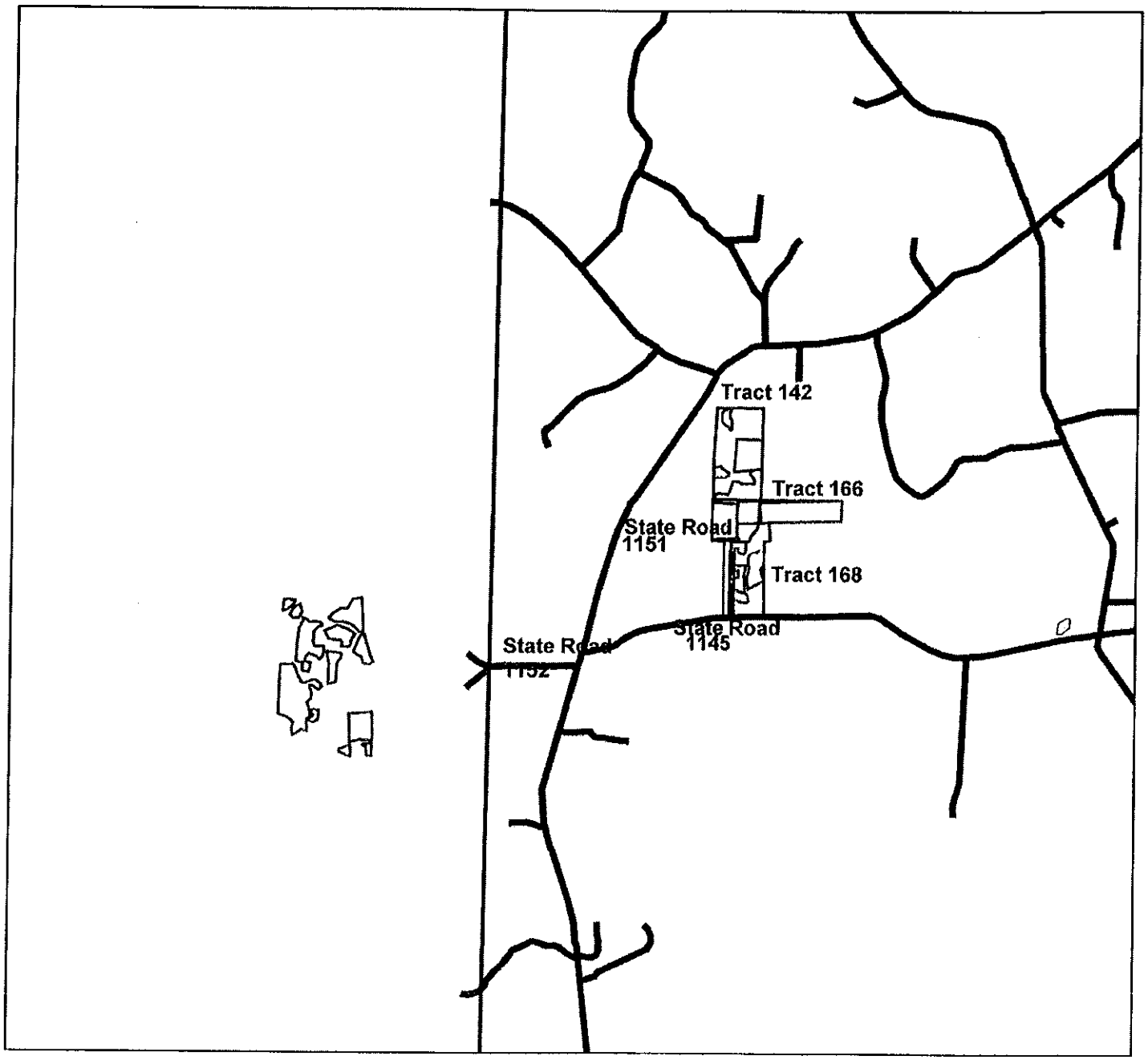
CNMP Planner/Technical Specialist: **__Carl Henry Outz Jr____**

Directional Map

Date: 3/5/2012

Customer(s): THURMAN JESSUP
District: CHATHAM SOIL & WATER CONSERVATION DISTRICT

Field Office: PITTSBORO SERVICE CENTER
Agency: USDA Service Center
Assisted By: Carl Outz



1,900 0 1,900 3,800 5,700 7,600 Feet

N

Conservation Plan Map

Date: 11/28/2007

Customer(s): THURMAN JESSUP
District: CHATHAM SOIL & WATER CONSERVATION DISTRICT

Field Office: PITTSBORO SERVICE CENTER
Agency: USDA Service Center
Assisted By: Carl Outz

430 0 430 860 1,290 1,720
Feet

N

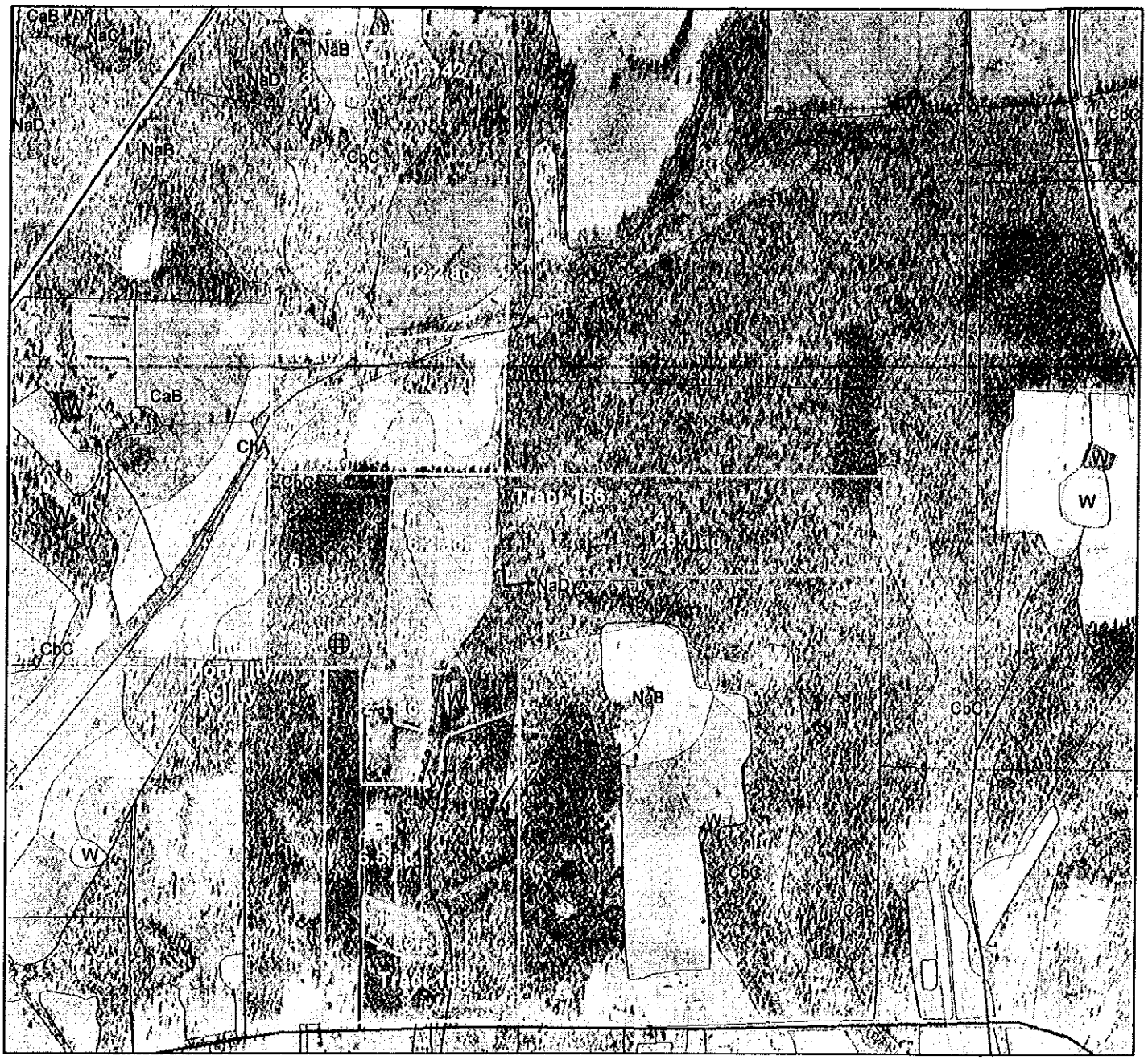
Soils Map

Date: 11/28/2007

Customer(s): THURMAN JESSUP

District: CHATHAM SOIL & WATER CONSERVATION DISTRICT

Field Office: PITTSBORO SERVICE CENTER
Agency: USDA Service Center
Assisted By: Carl Outz



390 0 390 780 1,170 1,560 Feet

N

NRCS Natural Resources Conservation Service
PITTSBORO SERVICE CENTER
45 SOUTH ST STE 1
PITTSBORO, NC 27312-5684
9195422244 ext. 100

CARL HENRY OUTZ JR
ENVIRONMENTAL SPECIALIST

Conservation Plan

THURMAN JESSUP
6913 BRUSH CREEK RD
BENNETT, NC 27208

Hay

Tract: 166

Comprehensive Nutrient Management Plan -

All planned practices contained in the written Comprehensive Nutrient Management Plan are applied according to NRCS standards and specifications.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 no	10	2013		
Total:	1 no				

Comprehensive Nutrient Management Plan -

The written site specific Comprehensive Nutrient Management Plan will meet the planning criteria described in the Field Office Technical Guide.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 no	10	2012		
Total:	1 no				

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	6.2 ac	10	2012		
2	5.5 ac	10	2012		
3	2.1 ac	10	2012		
4	26.1 ac	10	2012		
5	16.5 ac	10	2012		
Total:	54.2 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	6.2 ac	10	2012		
2	5.5 ac	10	2012		
3	2.1 ac	10	2012		
4	26.1 ac	10	2012		
5	16.5 ac	10	2012		
Total:	54.2 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	6.2 ac	10	2012		
2	5.5 ac	10	2012		
3	2.1 ac	10	2012		
4	26.1 ac	10	2012		
5	16.5 ac	10	2012		
Total:	54.2 ac				

Tract: 168

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	2.1 ac	10	2012		
2	2.8 ac	10	2012		
4	6.5 ac	10	2012		
Total:	10.4 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	2.1 ac	10	2012		
2	2.8 ac	10	2012		
4	6.5 ac	10	2012		
Total:	10.4 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	2.1 ac	10	2012		
2	2.8 ac	10	2012		
4	6.5 ac	10	2012		
Total:	10.4 ac				

Tract: 5981

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	1.56 ac	10	2012		
3	1.59 ac	10	2012		
Total:	3.15 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	1.56 ac	10	2012		
3	1.59 ac	10	2012		
Total:	3.15 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	1.56 ac	10	2012		
3	1.59 ac	10	2012		
Total:	3.15 ac				

Tract: 59490

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	20 ac	10	2012		
Total:	20 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	20 ac	10	2012		
Total:	20 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	20 ac	10	2012		
Total:	20 ac				

Pasture

Tract: 142

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	12.2 ac	10	2012		
2	9.4 ac	10	2012		
3	1.9 ac	10	2012		
4	1.6 ac	10	2012		
Total:	23.4 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	12.2 ac	10	2012		
2	9.4 ac	10	2012		
3	1.9 ac	10	2012		
4	1.6 ac	10	2012		
Total:	23.4 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	12.2 ac	10	2012		
2	9.4 ac	10	2012		
3	1.9 ac	10	2012		
4	1.6 ac	10	2012		
Total:	23.4 ac				

Tract: 5949

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 ac	10	2012		
2	1.85 ac	10	2012		
3	12.97 ac	10	2012		
4	3.6 ac	10	2012		
5	5.76 ac	10	2012		
6	4.6 ac	10	2012		
7	17.95 ac	10	2012		
8	1.49 ac	10	2012		
9	4.15 ac	10	2012		
Total:	50.89 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 ac	10	2012		
2	1.85 ac	10	2012		
3	12.97 ac	10	2012		
4	3.6 ac	10	2012		
5	5.76 ac	10	2012		
6	4.6 ac	10	2012		
7	17.95 ac	10	2012		
8	1.49 ac	10	2012		
9	4.15 ac	10	2012		
Total:	50.89 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	1 ac	10	2012		
2	1.85 ac	10	2012		
3	12.97 ac	10	2012		
4	3.6 ac	10	2012		
5	5.76 ac	10	2012		
6	4.6 ac	10	2012		
7	17.95 ac	10	2012		
8	1.49 ac	10	2012		
9	4.15 ac	10	2012		
Total:	50.89 ac				

Tract: 5981

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	7.96 ac	10	2012		
Total:	7.96 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	7.96 ac	10	2012		
Total:	7.96 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	7.96 ac	10	2012		
Total:	7.96 ac				

Tract: 9420

Forage Harvest Management

Manage forage plants in order to maintain vigorous growth, economic yields, minimize undesirable species/pests, and maintain or improve wildlife habitat. Manage cutting heights in order to promote re-growth. The practice location is located on your Conservation Plan Map and will be maintained according to NRCS standards and specifications. Refer to Conservation Instruction NC 190-102, Managing Hybrid Bermudagrass or NC 190-103 Managing Cool Season Forage Plants.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	18.72 ac	10	2012		
Total:	17.6 ac				

Nutrient Management

Nutrients will be applied according to the attached Nutrient Management Plan in order to maximize plant production, properly utilize manure on these fields, and minimize off-site transport of the nutrients applied. This plan identifies the amount, source, placement, and timing of nutrients to be applied for these fields. Nitrogen application rates are based on realistic yield expectations for the crop and soil, and the application rates for other nutrients and amendments are based on a soil test. Because animal waste is being applied, a Phosphorus Loss Assessment has been conducted on these fields, and the results have been incorporated into the Nutrient Management Plan. Soil tests should be taken at once every three years. See the attached Nutrient Management job sheet for additional specifications and considerations.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	18.72 ac	10	2012		
Total:	17.6 ac				

Waste Utilization

Apply swine waste according to soil test and waste analysis. Broadcast waste on fields in accordance to required nutrients shown on soil test for selected crops or in waste utilization plan. Split applications of nitrogen if more than 100 lbs. of available nitrogen is required.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	18.72 ac	10	2012		
Total:	17.6 ac				

CERTIFICATION OF PARTICIPANTS

Thurman Jessup 5/7/12
THURMAN JESSUP DATE

CERTIFICATION OF:

ENVIRONMENTAL SPECIALIST
Carl Henry Outz Jr 5/7/12
CARL HENRY OUTZ JR DATE

CONSERVATION DISTRICT

CHATHAM SOIL & WATER CONS DATE

PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collections is 0578-0013. The time required to complete this information collection is estimated to average 45/0.75 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

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Nutrient Management Plan For Animal Waste Utilization

04-30-2012

This plan has been prepared for:

Randy & Thurman Jessup
Randy & Thurman Jessup
6913 Brush Creek Farm
Bennett, NC 27208
336-879-3276

This plan has been developed by:

Carl Henry Outz Jr.
Chatham Soil and Water Conservation Dist
P. O. Box 309
Pittsboro, NC 27312
919-545-8353

Carl Henry Outz Jr.
Developer Signature

Type of Plan: Nutrient Management with Both Manure and Fertilizer

Owner/Manager/Producer Agreement

I (we) understand and agree to the specifications and the operation and maintenance procedures established in this nutrient management plan which includes an animal waste utilization plan for the farm named above. I have read and understand the Required Specifications concerning animal waste management that are included with this plan.

Thurman Jessup
Signature (owner)

5/7/12
Date

Nori R Jessup
Signature (manager or producer)

5/7/12
Date

This plan meets the minimum standards and specifications of the U.S. Department of Agriculture - Natural Resources Conservation Service or the standard of practices adopted by the Soil and Water Conservation Commission.

Plan Approved By: Carl Henry Outz Jr. 5/7/12
Technical Specialist Signature — Date

Nutrients applied in accordance with this plan will be supplied from the following source(s):

Commercial Fertilizer is included in this plan.

S7	Swine Feeder-Finish Lagoon Liquid waste generated 2,688,300 gals/year by a 2,900 animal Swine Finishing Lagoon Liquid operation. This production facility has waste storage capacities of approximately 270 days.				
Estimated Pounds of Plant Available Nitrogen Generated per Year					
Broadcast	6192				
Incorporated	10634				
Injected	11710				
Irrigated	6730				
	Max. Avail. PAN (lbs) *	Actual PAN Applied (lbs)	PAN Surplus/ Deficit (lbs)	Actual Volume Applied (Gallons)	Volume Surplus/ Deficit (Gallons)
Year 1	6,192	13775	-7,583	5,980,720	-3,292,420

S8	Swine Feeder-Finish Lagoon Sludge waste generated 964,975 gals in a 10 year(s) and 1 month(s) period by a 2,900 animal Swine Finishing Lagoon Sludge operation.				
Estimated Pounds of Plant Available Nitrogen Generated					
Broadcast	10991				
Incorporated	13096				
Injected	14031				
Irrigated	10289				
	Max. Avail. PAN (lbs) *	Actual PAN Applied (lbs)	PAN Surplus/ Deficit (lbs)	Actual Volume Applied (Gallons)	Volume Surplus/ Deficit (Gallons)
Year 1	10,991	13775	-2,784	1,209,393	-244,418

Note: In source ID, S means standard source, U means user defined source.

* Max. Available PAN is calculated on the basis of the actual application method(s) identified in the plan for this source.

Narrative

1. Grassland may consists of fescue, matua or orchardgrass. The application amount is the same for all three types of grassland.

2. This farm applies both swine and poultry manure to these grassland fields. There are two separate waste management plans for each livestock type. Fields that have both types of manure land applied to them are required to have records for both types of manure applications. The planned nitrogen application rate in this waste management plan can not be exceeded when both types of manure are land applied to the same fields. Land application from both nitrogen sources cannot exceed the planned nitrogen PA nutrient required amount in this nutrient management plan.

3. Tract 166, fields 1,2,4 and 5 have a soil type of 130B and an irrigation application rate of .4 inch per hour. The application amount per event is one inch.

4. Tract 166, field 3 have soil type 525B and have an irrigation application rate of .2 inch per hour. The application amount per event is one inch.

5. Tract 142, fields 1,2,3,4 have soil type 130B and an irrigation application rate of .4 inch per hour. The application amount per event is one inch.

6. The irrigation frequency for peak use for 130B soil is every five days.

7. The irrigation frequency for peak use by 525B soil is every four days.

8. Manure or organic waste will not be applied within 100 feet of water wells.

9. Manure or organic waste will not be applied within 200 feet of a dwelling other than that owned by the producer. However, application within 200 feet of a
dwelling is allowed if a home is constructed within 200 feet of any waste application sprayfield that is in a current plan. Any sprayfield added to a nutrient
management/waste utilization plan after initial construction begins on a home must abide by the 200 foot application setback.

10. North Carolina law conditionally (see latest SB 1217 Interagency Group Guidance Document) prohibits application of swine waste within 75 feet of any property
boundary on which an occupied residence is located, except of that owned by the producer.

11. Setbacks for swine waste land application areas vary according to permit, the date of facility siting and/or the date the waste application field is placed in use. Setbacks for other types of operations with coverage under State General Permits and as defined in G.S. 143-215.10B, have a single setback requirement. The following outline provides setback requirements by time periods and legislation.
I. All operations meeting the G.S. 143-215.10B definitions (formerly 2H.0200 thresholds), including swine farms sited or expanded before September 30, 1995 are required to have from the outer perimeter of the waste application area the following:
A. A 25-foot vegetative buffer from perennial water (2H.0217 (h)(iii))
B. A 200-foot distance to dwelling not owned by the producer (NRCS Standard Code 633)

Narrative

C. A 100-foot distance to a well (NRCS Standard Code 633 Standard)
For swine farms with a waste application field put in place after August 27, 1997 category IV applies:
II. Swine farms sited after September 30, 1995 and constructed or expanded before August 27, 1997 must meet items I A, B, and C and have from the outer perimeter of the waste application area the following:
A. A 50-foot distance to perennial stream/river other than an irrigation ditch or canal (Senate Bill 1080)
B. A 50-foot distance to a residential property boundary (Senate Bill 1080)
For waste application fields put in place after August 27, 1997 category IV applies:
III. Swine farms sited or expanded after August 27, 1997 must meet the requirements of items I A, B, and C and must have from the outer perimeter of the waste application area the following:
A. A 75-foot distance to a perennial stream/river other than an irrigation ditch or canal (House Bill 515)
B. A 75-foot distance to a residential property boundary (House Bill 515)
IV. Any swine farm regardless of siting date must meet the 75-foot requirements of item III for any new waste application field put in use after August 27, 1997 which:
A. As of August 27, 1997, the waste application field was not within the property boundary where the waste was generated or
B. As of August 27, 1997, the waste application field was not within the property boundary where waste was previously applied from the operation.
Other new waste application fields within the property boundary where the waste is generated or has been previously applied are not required to meet the 75-foot buffer, but must comply with items I and II.
* Guidance does not reflect Neuse, Tar-Pam and Jordan Lake Rule requirements
APPENDIX 8.1
V. All farms renewing NPDES permits after that date must implement one or a combination of the following waste application setbacks from surface waters including streams, lakes, and other surface waters, and conduits to those waters (40 CFR 412.4):
A. 100-foot setback (no closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters);
B. 35-foot wide vegetated buffer can be substituted for the 100-foot setback specified in A;
C. 20-foot wide vegetated setback with water table control structures to trap particulate nutrient losses, or any other compliance alternative approved by the Director of DWQ that provides pollutant reductions equivalent or better than reductions achieved by the 100-foot setback specified in A.

12. Buffers are shown on the conservation plan map. Buffer acreages are as follows:

Tract 142

1 - .13 ac
2 - .18 ac
4 - .13 ac

Narrative

Tract 166

2 - .14 ac
3 - .16 ac

Tract 168

1 - .16 ac
2 - .67 ac
4 - .37 ac

Tract 5949

1 - .4 ac
2 - .34 ac
3 - .51 ac
4 - .35 ac

Names, addresses and phone numbers of leased land owners:

Clyde Hicks
7128 Bonlee Bennett Rd
Siler City, NC 27344
Telephone: 919-742-5407

Reggie Jessup
6615 Joe Branson Rd
Bennett, NC 27208
336-879-1771

The table shown below provides a summary of the crops or rotations included in this plan for each field. Realistic Yield estimates are also provided for each crop, as well as the crop's P2O5 Removal Rate. The Leaching Index (LI) and the Phosphorous Loss Assessment Tool (PLAT) Rating are also provided for each field, where available.

If a field's PLAT Rating is High, any planned manure application is limited to the phosphorous removal rate of the harvested plant biomass for the crop rotation or multiple years in the crop sequence. Fields with a Very High PLAT Rating should receive no additional applications of manure. Regardless of the PLAT rating, starter fertilizers may be recommended in accordance with North Carolina State University guidelines or recommendations. The quantity of P2O5 applied to each crop is shown in the following table if the field's PLAT rating is High or Very High.

Planned Crops Summary

Tract	Field	Total Acres	Useable Acres	Plat Rating	LI	Soil Series	Crop Sequence	RYE	P2O5 Removal (lbs/acre)	P2O5 Applied (lbs/acre)
142	1	12.20	11.98	Low	10.0	Cid	Fescue Pasture	4.4 Tons	7	N/A
142	2	9.40	9.22	Low	10.0	Nason	Fescue Pasture	4.4 Tons	7	N/A
142	3	1.90	1.90	Low	10.0	Nason	Fescue Pasture	4.4 Tons	7	N/A
142	4	1.60	1.47	Low	10.0	Nason	Fescue Pasture	4.4 Tons	7	N/A
166	1	6.20	6.20	Low	10.0	Nason	Fescue Hay	4.4 Tons	69	N/A
166	2	5.50	5.36	Low	10.0	Nason	Fescue Hay	4.4 Tons	69	N/A
166	3	2.10	1.94	Low	10.0	Cid	Fescue Hay	4.4 Tons	69	N/A
166	4	26.10	26.10	Low	10.0	Nason	Fescue Hay	4.4 Tons	69	N/A
166	5	16.50	16.50	Low	10.0	Nason	Fescue Hay	4.4 Tons	69	N/A
168	1	2.00	1.84	Low	10.0	Cid	Fescue Hay	4.4 Tons	69	N/A
168	2	2.80	2.13	Low	10.0	Cid	Fescue Hay	4.4 Tons	69	N/A
168	4	6.50	6.13	Low	10.0	Cid	Fescue Hay	4.4 Tons	69	N/A
5949	1	1.00	0.60	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	2	1.85	1.51	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	3	12.97	12.46	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	4	3.60	3.24	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	5	5.76	5.76	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	6	4.60	4.60	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	7	17.95	17.95	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	8	1.49	1.49	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5949	9	4.15	4.15	Low	10.0	Cid	Fescue Pasture	4.4 Tons	7	N/A
59490	1	20.00	20.00	Low	15.0	Badin	Fescue Hay	3.9 Tons	61	N/A
5981	1	7.96	7.96	Low	15.0	Badin	Fescue Pasture	3.9 Tons	6	N/A
5981	2	1.56	1.56	Low	15.0	Badin	Fescue Hay	3.9 Tons	61	N/A
5981	3	1.59	1.59	Low	15.0	Badin	Fescue Hay	3.9 Tons	61	N/A
9420	1	18.72	16.80	Low	10.0	Cid	Fescue Pasture	4.4 Tons	7	N/A
PLAN TOTALS:		196.00	190.44							

NOTE: Symbol * means user entered data.

LI	*Potential Leaching*	*Technical Guidance*
< 2	Low potential to contribute to soluble nutrient leaching below the root zone.	None
>= 2 & <= 10	Moderate potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned.
> 10	High potential to contribute to soluble nutrient leaching below the root zone.	Nutrient Management (590) should be planned. Other conservation practices that improve the soils available water holding capacity and improve nutrient use efficiency should be considered. Examples are Cover Crops (340) to scavenge nutrients, Sod-Based Rotations (328), Long-Term No-Till (778), and edge-of-field practices such as Filter Strips (393) and Riparian Forest Buffers (391).

PLAT Index	*Rating*	*P Management Recommendation*
0 - 25	Low	No adjustment needed; N based application
25 - 50	Medium	No adjustment needed; N based application
51 - 100	High	Application limited to crop P removal
> 100	Very High	Starter P application only

NOTE: Symbol * means user entered data.

The Waste Utilization table shown below summarizes the waste utilization plan for this operation. This plan provides an estimate of the number of acres of cropland needed to use the nutrients being produced. The plan requires consideration of the realistic yields of the crops to be grown, their nutrient requirements, and proper timing of applications to maximize nutrient uptake.

This table provides an estimate of the amount of nitrogen required by the crop being grown and an estimate of the nitrogen amount being supplied by manure or other by-products, commercial fertilizer and residual from previous crops. An estimate of the quantity of solid and liquid waste that will be applied on each field in order to supply the indicated quantity of nitrogen from each source is also included. A balance of the total manure produced and the total manure applied is included in the table to ensure that the plan adequately provides for the utilization of the manure generated by the operation.

Waste Utilization Table **Year 1**

Tract	Field	Source ID	Soil Series	Total Acres	Use. Acres	Crop	RYE	Applic. Period	Nitrogen PA Nutrient Req'd (lbs/A) N	Comm. Fert. Nutrient Applied (lbs/A) N	Res. (lbs/A) N	Applic. Method	Manure PA NutrientApplied (lbs/A) N	Liquid ManureApplied (acre) 1000 gal/A	Solid Manure Applied (acre) Tons	Liquid Manure Applied (Field) 1000 gals	Solid Manure Applied (Field) tons
142	1	S7	Cid	12.20	11.98	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	364.10	0.00
142	1	S8	Cid	12.20	11.98	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	73.63	0.00
142	2	S7	Nason	9.40	9.22	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	280.22	0.00
142	2	S8	Nason	9.40	9.22	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	56.66	0.00
142	3	S7	Nason	1.90	1.90	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	57.75	0.00
142	3	S8	Nason	1.90	1.90	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	11.68	0.00
142	4	S7	Nason	1.60	1.47	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	44.68	0.00
142	4	S8	Nason	1.60	1.47	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	9.03	0.00
166	1	S7	Nason	6.20	6.20	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	242.27	0.00
166	1	S8	Nason	6.20	6.20	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	48.99	0.00
166	2	S7	Nason	5.50	5.36	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	209.45	0.00
166	2	S8	Nason	5.50	5.36	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	42.35	0.00
166	3	S7	Cid	2.10	1.94	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	75.81	0.00
166	3	S8	Cid	2.10	1.94	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	15.33	0.00
166	4	S7	Nason	26.10	26.10	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	1,019.88	0.00
166	4	S8	Nason	26.10	26.10	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	206.24	0.00

Waste Utilization Table

Year 1

Tract	Field	Source ID	Soil Series	Total Acres	Use. Acres	Crop	RYE	Applic. Period	Nitrogen PA Nutrient Req'd (lbs/A) N	Comm. Fert. Nutrient Applied (lbs/A) N	Res. (lbs/A) N	Applic. Method	Manure PA NutrientApplied (lbs/A) N	Liquid ManureApplied (acre) 1000 gal/A	Solid Manure Applied (acre) Tons	Liquid Manure Applied (Field) 1000 gals	Solid Manure Applied (Field) tons
166	5	S7	Nason	16.50	16.50	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	644.75	0.00
166	5	S8	Nason	16.50	16.50	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	130.38	0.00
168	1	S7	Cid	2.00	1.84	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	71.90	0.00
168	1	S8	Cid	2.00	1.84	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	14.54	0.00
168	2	S7	Cid	2.80	2.13	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	83.23	0.00
168	2	S8	Cid	2.80	2.13	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	16.83	0.00
168	4	S7	Cid	6.50	6.13	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	39.08	0.00	239.53	0.00
168	4	S8	Cid	6.50	6.13	Fescue Hay	4.4 Tons	8/1-7/31	191	11	0	Broad.	90	7.90	0.00	48.44	0.00
5949	1	S7	Badin	1.00	0.60	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	13.03	0.00
5949	1	S8	Badin	1.00	0.60	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	2.63	0.00
5949	2	S7	Badin	1.85	1.51	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	32.78	0.00
5949	2	S8	Badin	1.85	1.51	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	6.63	0.00
5949	3	S7	Badin	12.97	12.46	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	270.49	0.00
5949	3	S8	Badin	12.97	12.46	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	54.70	0.00
5949	4	S7	Badin	3.60	3.24	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	70.34	0.00
5949	4	S8	Badin	3.60	3.24	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	14.22	0.00
5949	5	S7	Badin	5.76	5.76	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	125.04	0.00
5949	5	S8	Badin	5.76	5.76	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	25.29	0.00
5949	6	S7	Badin	4.60	4.60	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	99.86	0.00
5949	6	S8	Badin	4.60	4.60	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	20.19	0.00
5949	7	S7	Badin	17.95	17.95	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	389.67	0.00
5949	7	S8	Badin	17.95	17.95	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	78.80	0.00

Waste Utilization Table **Year 1**

Tract	Field	Source ID	Soil Series	Total Acres	Use. Acres	Crop	RYE	Applic. Period	Nitrogen PA Nutrient Req'd (lbs/A) N	Comm. Fert. Nutrient Applied (lbs/A) N	Res. (lbs/A) N	Applic. Method	Manure PA NutrientApplied (lbs/A) N	Liquid ManureApplied (acre) 1000 gal/A	Solid Manure Applied (acre) Tons	Liquid Manure Applied (Field) 1000 gals	Solid Manure Applied (Field) tons
5949	8	S7	Badin	1.49	1.49	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	32.35	0.00
5949	8	S8	Badin	1.49	1.49	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	6.54	0.00
5949	9	S7	Cid	4.15	4.15	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	126.13	0.00
5949	9	S8	Cid	4.15	4.15	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	25.51	0.00
59490	1	S7	Badin	20.00	20.00	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	34.73	0.00	694.68	0.00
59490	1	S8	Badin	20.00	20.00	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	7.02	0.00	140.48	0.00
5981	1	S7	Badin	7.96	7.96	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	21.71	0.00	172.80	0.00
5981	1	S8	Badin	7.96	7.96	Fescue Pasture	3.9 Tons	8/1-7/31	127	27	0	Broad.	50	4.39	0.00	34.94	0.00
5981	2	S7	Badin	1.56	1.56	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	34.73	0.00	54.19	0.00
5981	2	S8	Badin	1.56	1.56	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	7.02	0.00	10.96	0.00
5981	3	S7	Badin	1.59	1.59	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	34.73	0.00	55.23	0.00
5981	3	S8	Badin	1.59	1.59	Fescue Hay	3.9 Tons	8/1-7/31	169	9	0	Broad.	80	7.02	0.00	11.17	0.00
9420	1	S7	Cid	18.72	16.80	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	30.39	0.00	510.59	0.00
9420	1	S8	Cid	18.72	16.80	Fescue Pasture	4.4 Tons	8/1-7/31	143	3	0	Broad.	70	6.15	0.00	103.25	0.00
															Total Applied, 1000 gallons	7,190.11	
															Total Produced, 1000 gallons	3,653.28	
															Balance, 1000 gallons	-3,536.84	
															Total Applied, tons		0.00
															Total Produced, tons		0.00
															Balance, tons		0.00

Notes: 1. In the tract column, ~ symbol means leased, otherwise, owned. 2. Symbol * means user entered data.

The Nutrient Management Recommendations table shown below provides an annual summary of the nutrient management plan developed for this operation. This table provides a nutrient balance for the listed fields and crops for each year of the plan. Required nutrients are based on the realistic yields of the crops to be grown, their nutrient requirements and soil test results. The quantity of nutrient supplied by each source is also identified.

The total quantity of nitrogen applied to each crop should not exceed the required amount. However, the quantity of other nutrients applied may exceed their required amounts. This most commonly occurs when manure or other byproducts are utilized to meet the nitrogen needs of the crop. Nutrient management plans may require that the application of animal waste be limited so as to prevent over application of phosphorous when excessive levels of this nutrient are detected in a field. In such situations, additional nitrogen applications from nonorganic sources may be required to supply the recommended amounts of nitrogen.

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract / Field	142	1	Req'd Nutrients	143	100	0	0	0	0	0	0
Acres / App. Period	11.98	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	0
Soil Series	Cid		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	166	132	51	2	7	2	0
Tract / Field	142	2	Req'd Nutrients	143	80	0	0	0	0	0	0
Acres / App. Period	9.22	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	0
Soil Series	Nason		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	186	132	51	2	7	2	0
Tract / Field	142	3	Req'd Nutrients	143	100	0	0	0	0	0	0
Acres / App. Period	1.90	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	0
Soil Series	Nason		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	166	132	51	2	7	2	0
Tract / Field	142	4	Req'd Nutrients	143	80	0	0	0	0	0	0
Acres / App. Period	1.47	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	0
Soil Series	Nason		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	186	132	51	2	7	2	0

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract	Field	166	1	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres	App. Period	6.20	8/1-7/31	Supplied By:								
CROP		Fescue Hay		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series		Nason		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal	Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract	Field	166	2	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres	App. Period	5.36	8/1-7/31	Supplied By:								
CROP		Fescue Hay		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series		Nason		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal	Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract	Field	166	3	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres	App. Period	1.94	8/1-7/31	Supplied By:								
CROP		Fescue Hay		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series		Cid		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.4 Tons	08-19-11	Manure	180	342	170	66	2	8	2	0
P Removal	Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract	Field	166	4	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres	App. Period	26.10	8/1-7/31	Supplied By:								
CROP		Fescue Hay		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series		Nason		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal	Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract	Field	166	5	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres	App. Period	16.50	8/1-7/31	Supplied By:								
CROP		Fescue Hay		Starter	0	0	0	0	0	0	0	0
				Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series		Nason		Residual	0	0	0	0	0	0	0	0
RYE	Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal	Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract / Field	168	1	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres / App. Period	1.84	8/1-7/31	Supplied By:								
CROP	Fescue Hay		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series	Cid		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal / Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract / Field	168	4	Req'd Nutrients	191	0	0	0	0	0	0	0
Acres / App. Period	6.13	8/1-7/31	Supplied By:								
CROP	Fescue Hay		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	11	0	0	0	0	0	0	0
Soil Series	Cid		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	08-29-11	Manure	180	342	170	66	2	8	2	0
P Removal / Rating	69 lbs/ac.	Low	BALANCE	0	342	170	66	2	8	2	0
Tract / Field	5949	1	Req'd Nutrients	127	80	80	0	0	0	0	1
Acres / App. Period	0.60	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	0	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	111	14	37	1	4	1	0
Tract / Field	5949	2	Req'd Nutrients	127	80	80	0	0	0	0	1
Acres / App. Period	1.51	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	0	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	111	14	37	1	4	1	0
Tract / Field	5949	3	Req'd Nutrients	127	80	80	0	0	0	0	1
Acres / App. Period	12.46	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	0	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	111	14	37	1	4	1	0

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract / Field	5949	4	Req'd Nutrients	127	80	80	0	0	0	0	1
Acres / App. Period	3.24	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	0	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	111	14	37	1	4	1	0
Tract / Field	5949	5	Req'd Nutrients	127	80	80	0	0	0	0	1
Acres / App. Period	5.76	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	0	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	111	14	37	1	4	1	0
Tract / Field	5949	6	Req'd Nutrients	127	110	110	0	0	0	0	1
Acres / App. Period	4.60	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	16	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	81	0	37	1	4	1	0
Tract / Field	5949	7	Req'd Nutrients	127	110	110	0	0	0	0	1
Acres / App. Period	17.95	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	16	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	81	0	37	1	4	1	0
Tract / Field	5949	8	Req'd Nutrients	127	110	110	0	0	0	0	1
Acres / App. Period	1.49	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	16	0	0	0	0	1
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	81	0	37	1	4	1	0

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract / Field	5949	9	Req'd Nutrients	143	110	110	0	0	0	0	1
Acres / App. Period	4.15	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	1
Soil Series	Cid		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	05-18-10	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	156	22	51	2	7	2	0
Tract / Field	59490	1	Req'd Nutrients	169	0	40	0	0	0	0	0
Acres / App. Period	20.00	8/1-7/31	Supplied By:								
CROP	Fescue Hay		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	9	0	0	0	0	0	0	0
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	160	304	151	59	2	8	2	0
P Removal / Rating	61 lbs/ac.	Low	BALANCE	0	304	111	59	2	8	2	0
Tract / Field	5981	1	Req'd Nutrients	127	110	130	0	0	0	0	0
Acres / App. Period	7.96	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	27	0	36	0	0	0	0	0
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	100	191	94	37	1	4	1	0
P Removal / Rating	6 lbs/ac.	Low	BALANCE	0	81	0	37	1	4	1	0
Tract / Field	5981	2	Req'd Nutrients	169	0	130	0	0	0	0	0
Acres / App. Period	1.56	8/1-7/31	Supplied By:								
CROP	Fescue Hay		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	9	0	0	0	0	0	0	0
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	160	304	151	59	2	8	2	0
P Removal / Rating	61 lbs/ac.	Low	BALANCE	0	304	21	59	2	8	2	0
Tract / Field	5981	3	Req'd Nutrients	169	0	130	0	0	0	0	0
Acres / App. Period	1.59	8/1-7/31	Supplied By:								
CROP	Fescue Hay		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	9	0	0	0	0	0	0	0
Soil Series	Badin		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	3.9 Tons	05-18-10	Manure	160	304	151	59	2	8	2	0
P Removal / Rating	61 lbs/ac.	Low	BALANCE	0	304	21	59	2	8	2	0

Nutrient Management Recommendations Test

YEAR	1			N (lbs/A)	P2O5 (lbs/A)	K2O (lbs/A)	Mg (lbs/A)	Mn (lbs/A)	Zn (lbs/A)	Cu (lbs/A)	Lime (tons/A)
Tract / Field	9420	1	Req'd Nutrients	143	110	110	0	0	0	0	1
Acres / App. Period	16.80	8/1-7/31	Supplied By:								
CROP	Fescue Pasture		Starter	0	0	0	0	0	0	0	0
			Commercial Fert.	3	0	0	0	0	0	0	1
Soil Series	Cid		Residual	0	0	0	0	0	0	0	0
RYE / Sample Date	4.4 Tons	05-18-10	Manure	140	266	132	51	2	7	2	0
P Removal / Rating	7 lbs/ac.	Low	BALANCE	0	156	22	51	2	7	2	0

NOTE: Symbol * means user entered data.

The Required Soil Test Values shown in the following table provide a summary of recommended actions that should be taken if soil tests indicate excessive levels of copper or zinc. Fields that receive manure must have an annual soil analysis for these elements. High levels of zinc and copper can adversely affect plant growth. Alternative crop sites must be used when the concentration of these metals approach excessive levels. Site life can be estimated by dividing the amount of copper and zinc to be applied in lbs/acre by 0.036 and 0.071, respectively and multiplying the result by 0.85. By adding this quantity to the current soil index for copper or zinc, we can predict life of the site for waste disposal.

In addition to copper and zinc indices, this table also provides a summary of lime recommendations for each crop based on the most recent soil sample. Application of lime at recommended rates is necessary to maintain soil pH in the optimum range for crop production .

Required Soil Test Values

Tract	Field	Crop	pH	Lime Recom. (tons/acre)	Cu-I	Copper Recommendation	Zn-I	Zinc Recommendation
142	1	Fescue Pasture	5.8	0.0	103	None	51	None
142	2	Fescue Pasture	5.9	0.0	118	None	62	None
142	3	Fescue Pasture	5.8	0.0	103	None	51	None
142	4	Fescue Pasture	5.9	0.0	118	None	62	None
166	1	Fescue Hay	6.0	0.0	121	None	71	None
166	2	Fescue Hay	6.0	0.0	121	None	71	None
166	3	Fescue Hay	6.0	0.0	121	None	71	None
166	4	Fescue Hay	5.9	0.0	122	None	69	None
166	5	Fescue Hay	5.8	0.0	88	None	44	None
168	1	Fescue Hay	5.9	0.0	101	None	48	None
168	4	Fescue Hay	5.9	0.0	101	None	48	None
5949	1	Fescue Pasture	4.9	1.4	50	None	137	None
5949	2	Fescue Pasture	4.9	1.4	50	None	137	None
5949	3	Fescue Pasture	4.9	1.4	50	None	137	None
5949	4	Fescue Pasture	4.9	1.4	50	None	137	None
5949	5	Fescue Pasture	4.9	1.4	50	None	137	None
5949	6	Fescue Pasture	4.9	1.4	140	None	45	None
5949	7	Fescue Pasture	4.9	1.4	140	None	45	None
5949	8	Fescue Pasture	4.9	1.4	140	None	45	None
5949	9	Fescue Pasture	4.9	1.4	140	None	45	None
59490	1	Fescue Hay	5.9	0.0	467	None	92	None
5981	1	Fescue Pasture	6.0	0.0	506	None	52	None
5981	2	Fescue Hay	6.0	0.0	506	None	52	None

Required Soil Test Values

Tract	Field	Crop	pH	Lime Recom. (tons/acre)	Cu-I	Copper Recommendation	Zn-I	Zinc Recommendation
5981	3	Fescue Hay	6.0	0.0	506	None	52	None
9420	1	Fescue Pasture	4.9	1.4	140	None	45	None

U.S. Department of Agriculture
Natural Resources Conservation Service
NRCS-CPA-52
6/2010

ENVIRONMENTAL EVALUATION WORKSHEET

A. Client Name: Thurman Jessup Swine Farm

B. Conservation Plan ID # (as applicable):
Program Authority (optional):

C. Identification # (farm, tract, field #, etc as required):
Tracts 142,166,168,5949,59490,5981,9420

D. Client's Objective(s) (purpose): To meet NPDES standards and requirements for required permit.

E. Need for Action:
Nutrient Mngt plan revision and plan updates to current

G. Alternatives

No Action √ if RMS [ ]	*Alternative 1* √ if RMS [X]	*Alternative 2* √ if RMS [ ]
No action	Comprehensive Nutrient Mngt	Nutrient Management

Resource Concerns

In Section "F" below, analyze, record, and address concerns identified through the Resources Inventory process. (See FOTG Section III - Resource Quality Criteria for guidance).

F. Resource Concerns and Existing / Benchmark Conditions (Analyze and record the existing/benchmark conditions for each identified concern)	H. Effects of Alternatives — *No Action* Amount, Status, Description (short and long term)	√ if does NOT meet QC	*Alternative 1* Amount, Status, Description (short and long term)	√ if does NOT meet QC	*Alternative 2* Amount, Status, Description (short and long term)	√ if does NOT meet QC
SOIL						
		NOT meet [X] QC		NOT meet [ ] QC		NOT meet [X] QC
		NOT meet [X] QC		NOT meet [ ] QC		NOT meet [X] QC
		NOT meet [ ] QC		NOT meet [ ] QC		NOT meet [ ] QC
WATER						
Quality-Excessive nutrients and organics in surface water	Nutrients and organics from waste entering water from runoff	NOT meet [X] QC	Stabilize area with critical area seeding, properly store waste 590 applied	NOT meet [ ] QC	Stabilize area with critical area seeding	NOT meet [X] QC
Quality- Excessive Suspended Sediment Turbidity in Surface Water	Sediment entering surface water	NOT meet [X] QC	Sedimentation significantly reduced by site stabilization	NOT meet [ ] QC	Sedimentation significantly reduced by site stabilization	NOT meet [X] QC
		NOT meet [ ] QC		NOT meet [ ] QC		NOT meet [ ] QC

F. Resouce Concerns and Existing / Benchmark Conditions (Analyze and record the existing/benchmark conditions for each identified concern)	H. (continued) *No Action*		*Alternative 1*		*Alternative 2*	
	Amount, Status, Description (short and long term)	√ if does NOT meet QC	Amount, Status, Description (short and long term)	√ if does NOT meet QC	Amount, Status, Description (short and long term)	√ if does NOT meet QC
AIR						
No resource concern identified		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
PLANTS						
No resource concern identified		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
ANIMALS						
No resource concern identified		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
		NOT meet ☐ QC		NOT meet ☐ QC		NOT meet ☐ QC
HUMAN - Economic and Social Considerations						
Management - Landowner satisfied with management	No change		Increased nutrient mngt,		Increased mngt, 590 applied	

Special Environmental Concerns: Environmental Laws, Executive Orders, policies, etc.

In Section "I" complete and attach applicable Environmental Procedures Guide Sheets for documentation. Items with a "•" may require a federal permit or consultation/coordination between the lead agency and another government agency. In these cases, effects may need to be determined in consultation with another agency. Planning and practice implementation may proceed for practices not involved in consultation.

I. Special Environmental Concerns (Document compliance with Environmental Laws, Executive Orders, policies, etc.)	J. Impacts to Special Environmental Concerns					
	No Action		*Alternative 1*		*Alternative 2*	
	Status and progress of compliance. (Complete and attach Guide Sheets as applicable)	√ if needs further action	Status and progress of compliance. (Complete and attach Guide Sheets as applicable)	√ if needs further action	Status and progress of compliance. (Complete and attach Guide Sheets as applicable)	√ if needs further action
•Clean Air Act	Not Applicable	☐	Not Applicable	☐	Not Applicable	☐
•Clean Water Act / Waters of the U.S. Sediment TMDL for Watershed	No action taken	☐	See attached documentation, sediment and nutrient loading reduced	☐	See attached documentation, sediment and nutrient loading reduced	☐
•Coastal Zone Management Piedmont NC	No action needed	☐	No action needed	☐	No action needed	☐
Coral Reefs Piedmont NC	Not Applicable	☐	Not Applicable	☐	Not Applicable	☐
•Cultural Resources / Historic Properties	Upon Review	☐	Upon Review	☐	Upon Review	☐
•Endangered and Threatened Species No species onsite.	No action	☐	Reducing sedimentation will improve the downstream habitat.	☐	Reducing sedimentation will improve the downstream habitat.	☐
Environmental Justice No EJ communities identified	No Effect	☐	No Effect	☐	No Effect	☐
•Essential Fish Habitat	No action needed	☐	No action needed	☐	No action needed	☐
Floodplain Management Is not located within floodplain	No Effect	☐	No Effect	☐	No Effect	☐
Invasive Species No species present	No invasives present	☐	No invasives present	☐	No invasives present	☐
•Migratory Birds/Bald and Golden Eagle Protection Act Migratory birds present present	No Effect	☐	No Effect	☐	No Effect	☐
Prime and Unique Farmlands No change in landuse	Prime - no landuse change	☐	Prime - no landuse change	☐	Prime - no landuse change	☐
Riparian Area Intermittent stream located within 150 feet	Riparian area is impacted by organics and nutrients	☐	Planned practices will improve riparian area	☐	Planned practices will improve riparian area	☐
•Wetlands No wetlands present	Upon review	☐	Upon review	☐	Upon review	☐
•Wild and Scenic Rivers Within Tick Creek and Rocky River Watershed	Sediment and nutrients could impact stream and river	☐	Practice installation will reduce sediment and nutrient impact on stream and river	☐	Practice installation will reduce sediment and nutrient impact on stream and river	☐

K. Other Agencies and Broad Public Concerns	*No Action*	*Alternative 1*	*Alternative 2*
Easements, Permissions, Public Review, or Permits Required and Agencies Consulted.	Not Applicable	Not Applicable	Not Applicable

K. (continued) Other Agencies and Broad Public Concerns		No Action	Alternative 1	Alternative 2
Cumulative Effects Narrative (Describe the cumulative impacts considered, including past, present and known future actions regardless of who performed the actions)		Continued sedimentation and nutrient loading will impact stream and river water quality for aquatic habitat, and human use.	Reducing sedimentation and nutrient loading will improve and benefit water quality for aquatic habitat human use in the stream and river in this watershed.	Reducing sedimantation and nutrien loading will improve and benefit water quality for aquatic habitat human use in the stream and river in this watershed.
L. Mitigation		Not Applicable	Not Applicable	Not Applicable
M. Preferred Alternative	√ preferred alternative	☐	☐	☐
	Supporting reason			

N. Context (Record context of alternatives analysis)

The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.

O. Determination of Significance or Extraordinay Circumstances

Intensity: Refers to the severity of impact. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

If you answer ANY of the below questions "yes" then contact the State Environmental Liaison as there may be extraordinary circumstances and significance issues to consider and a site specific NEPA analysis may be required.

Yes	No	
☐	☒	• Is the preferred alternative expected to cause significant effects on public health or safety?
☐	☒	• Is the preferred alternative expected to significantly effect unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?
☐	☒	• Are the effects of the preferred alternative on the quality of the human environment likely to be highly controversial?
☐	☒	• Does the preferred alternative have highly uncertain effects or involve unique or unknown risks on the human environment?
☐	☒	• Does the preferred alternative establish a precedent for future actions with significant impacts or represent a decision in principle about a future consideration?
☐	☒	• Is the preferred alternative known or reasonably expected to have potentially significant environment impacts to the quality of the human environment either individually or cumulatively over time?
☐	☒	• Will the preferred alternative likely have a significant adverse effect on ANY of the special environmental concerns? Use the Evaluation Procedure Guide Sheets to assist in this determination. This includes, but is not limited to, concerns such as cultural or historical resources, endangered and threatened species, environmental justice, wetlands, floodplains, coastal zones, coral reefs, essential fish habitat, wild and scenic rivers, clean air, riparian areas, natural areas, and invasive species.
☐	☒	• Will the preferred alternative threaten a violation of Federal, State, or local law or requirements for the protection of the environment?

P. The information recorded above is based on the best available information:

In the case where a non-NRCS person (i.e. a TSP) assists with planning they are to sign the first signature block and then NRCS is to sign the second block as the responsible federal agency for the planning action.

Carl Henry Outz Jr	CCP	5/7/2012
Signature (TSP if applicable)	Title	Date
Signature (NRCS)	Title	Date

The following sections are to be completed by the Responsible Federal Official (RFO)

Q. NEPA Compliance Finding (check one)

The preferred alternative:		Action required
☐	1) is **not a federal action** where the agency has control or responsibility.	Document in "R.1" below. No additional analysis is required
☐	2) is a federal action that is **categorically excluded** from further environmental analysis **and** there are no extraordinary circumstances.	Document in "R.2" below. No additional analysis is required
☐	3) is a federal action that has been **sufficiently analyzed** in an existing Agency state, regional, or national NEPA document and there are no predicted significant adverse environmental effects or extraordinary circumstances.	Document in "R.1" below. No additional analysis is required.
☐	4) is a federal action that has been sufficiently analyzed in another Federal agency's NEPA document (EA or EIS) that addresses the proposed NRCS action and its' effects **and has been formally adopted by NRCS**. NRCS is required to prepare and publish the agency's own Finding of No Significant Impact for an EA or Record of Decision for an EIS when adopting another agency's EA or EIS document. **Note: This box is not applicable to FSA.**	Contact the State Environmental Liaison for list of NEPA documents formally adopted and available for tiering. Document in "R.1" below. No additional analysis is required
☐	5) is a federal action that has **NOT** been sufficiently analyzed or may involve predicted significant adverse environmental effects or extraordinary circumstances and may require an EA or EIS.	Contact the State Environmental Liaison. Further NEPA analysis required.

R. Rationale Supporting the Finding

R.1 Findings Documentation	
R.2 Applicable Categorical Exclusion(s) (more than one may apply)	

I have considered the effects of the alternatives on the Resource Concerns, Economic and Social Considerations, Special Environmental Concerns, and Extraordinary Circumstances as defined by Agency regulation and policy.

S. Signature of Responsible Federal Official:

Signature	Title	Date

Additional notes

NOTE: THESE ARE THE RECOMMENDED REALISTIC YIELD NITROGEN APPLICATION RATES FOR THE SOIL TYPES LISTED ON THE PRECEEDING PAGES. WHEN A CROP IS PLANTED THAT VARIES FROM THE WASTE MANAGEMENT PLAN, THE NITROGEN APPLICATION RATES FROM ABOVE MUST BE USED IN ORDER TO COMPLY WITH .0200 REGULATIONS. IF HAYLAND IS USED FOR GRAZING, THE HAYLAND APPLICATION RATE MUST BE REDUCED BY 25 PERCENT. IF YOU HAVE ANY QUESTIONS PLEASE CALL OUR OFFICE, THE PHONE NUMBER IS 545-8353, OR 542-2244 EXT 3.